



# Concept Environmental and Social Review Summary

## Concept Stage

### **(ESRS Concept Stage)**

Date Prepared/Updated: 03/16/2023 | Report No: ESRSC03230



**BASIC INFORMATION**

**A. Basic Project Data**

Country	Region	Project ID	Parent Project ID (if any)
Türkiye	EUROPE AND CENTRAL ASIA	P179313	
Project Name	Türkiye Flood and Drought Management Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Water	Investment Project Financing	7/5/2023	9/19/2023
Borrower(s)	Implementing Agency(ies)		
Ministry of Treasury and Finance	State Hydraulic Works		

**Proposed Development Objective**

The project development objective is to increase access to flood protection for people living in selected areas of Türkiye and to strengthen the institutional capacity for effective and integrated flood and drought risk management.

Financing (in USD Million)	Amount
<b>Total Project Cost</b>	<b>400.00</b>

**B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?**

No

**C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]**

The proposed project will support the GoT in addressing the multitude of water security related challenges facing the selected locations of Türkiye, while enhancing the livelihood security and resilience of local communities and institutional strength of the related institutions against the risks and impacts of climate-induced flooding and drought. Through the three components, the Project would adopt an integrated approach to achieve these targets. Based on the existing capacity of DSI and other stakeholders which will be enhanced through the Bank’s previous experience in flood and drought management, this project will (i) improve flood management infrastructure, (ii) improve Early Warning Systems, (iii) enhance capacity and institutional structure, allowing for the coordination and integration of solutions among different government agencies as well as between government and local stakeholders. The project



will also deploy integrated green and gray infrastructure solutions as both short-term and long-term responses to mitigate the risks of floods and drought.

The proposed Flood and Drought Management Project is aligned with the World Bank Group (WBG) Country Partnership Framework (CPF) for Türkiye for FY18–FY21, which was extended to cover the FY22–23 period through the Performance and Learning Review. In the CPF, the Bank’s support for Türkiye is built on three focus areas: growth, inclusion, and sustainability. The proposed project is particularly well-aligned with the focus area of sustainability, and more specifically the CPF Objective 8 which is defined as “increased sustainability of infrastructure assets and natural capital” and “increased sustainability and resilience of cities”. The indicator of “Increased resilience of cities through increased number of disaster resilient public buildings and improved disaster preparedness.” is used to monitor this Objective. The project is also aligned with the Resilient and Net Zero Pathway outlined in the Türkiye CCDR. Among the six climate-specific priorities described in the Pathway, the project will contribute to Priority 5: Make growth more resilient and sustainable.

#### D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

Türkiye is located between Asia and Europe, a crossroad of the Balkans, Caucasus, Middle East, and the eastern Mediterranean with an 83 million population and 783,356 km<sup>2</sup> area. Located in Eurasia, the country is between the Black, Mediterranean, Marmara, and Aegean Seas, bordering Bulgaria, Greece, Syria, Iraq, Iran, Armenia, and Georgia. Türkiye is an upper-middle-income country, with the world’s 19th largest economy with a Gross Domestic Production (GDP) of US\$753.7 billion in 2019, according to the Turkish Statistical Institute (TurkStat). Seventy-five percent of its population lives in urban areas, and there are 81 provinces across the country.

Türkiye’s geographic and socioeconomic conditions make it particularly vulnerable to climate change – assessed as highly vulnerable in 9 out of 10 climate dimensions, compared with the OECD median of 2 out of 10, in the latest Türkiye Country Climate and Development Report (CCDR) (2022). Climate change poses significant risks to Türkiye’s water security, with high costs and associated impacts such as extreme flooding and droughts expected to increase in number and intensity. Floods and landslides frequently occur and cause significant localized losses across all parts of the country and economic losses associated with water extremes in Türkiye are significant. The immediate impacts of flooding include the loss of human life, livelihoods, damage to property, destruction of crops, loss of livestock, disruption of services, and deterioration of health conditions owing to waterborne diseases, among others. Key losses are linked to damage from floods and impacts of droughts. Floods are considered as the second most disastrous natural hazard after earthquakes in Türkiye, with almost 30 percent of all natural disasters in the country consisting of flood events. Drought is another key challenge for Türkiye especially as a large part of the country already has a semi-arid climate. Since Türkiye is located in the Mediterranean macroclimate region in the sub-tropical zone, rainfall variations occur from year to year. This causes regional and widespread drought impacts in various intensities. In this context, the project will increase access to flood protection for people living in selected areas of Türkiye and to strengthen the institutional capacity for effective and integrated flood and drought risk management.

#### D. 2. Borrower’s Institutional Capacity

State Hydraulic Works (DSI), a long-term client of the World Bank, is the main agency for implementation of structural and non-structural measures for flood management. Under the proposed components, DSI will coordinate with the



related stakeholders in flood and drought management, including the General Directorate of Water Management, Disaster and Emergency Management Presidency (AFAD), State Meteorological Services, as needed. Participation of General Directorate of Highways can be considered if there is need for rehabilitation of downstream transport structures (e.g. bridges and culverts) to ensure effectiveness of flood management structures to be constructed under the Project.

DSI is currently implementing several projects under the Bank’s Safeguards Operational Policies (OPs) as well as the Environmental and Social Framework (ESF). Türkiye Irrigation Modernization Project (TIMP) (P158418) was approved in January 2019 and currently being implemented in addition to previous lending operations completed in the 1990s, such as the Irrigation Rehabilitation Project (P008895), Drainage and On Farm Development Project (P008961), and Privatization of Irrigation Project (P009072), all prepared under the Bank OPs. The current overall safeguards rating was downgraded to Moderately Unsatisfactory for the TIMP mainly because of the excessive delay in closing out the Land Consolidation Implementation Report (LCIR) for one of the irrigation schemes. Although the land acquisition process is being implemented without major problems, the land consolidation process also needs to address some gaps such as identifying informal users to be in compliance with the Bank policies. Technical, fiduciary and safeguard assessments carried out for those projects, as well as ongoing experience during their implementation indicate DSI has systems capacity, which is also corroborated by DSI’s engagement with other development partners. DSI is therefore familiar with the World Bank’s ESF and the Bank’s OPs. Furthermore, DSI engagement in the implementation of the current Türkiye Resilient Landscape Integration Project - TULIP (P172562) under the ESF, coupled with its participation in the ESF training provided to Türkiye Project Implementation Units (PIUs) in February 2021, has provided the agency with some basic understanding of the ESF requirements. TULIP’s latest rating is identified as Moderately Satisfactory due to delays in the establishment of the Project Coordination Unit (PCU) of the main implementing agency, not relevant to DSI’s activities. However, DSI’s capacity is still weak and should be improved in terms of meeting the environmental and social requirements of the Bank policies, especially on Social Standard 5 (ESS5) of the ESF namely Land Acquisition, Restrictions on Land Use and Involuntary Resettlement. The PIU will be supported through providing trainings on the requirements of ESF and their implications on the Project to improve their capacity.

Within the scope of the project, DSI will establish a PIU consisting of a qualified environmental specialist, a social specialist and an occupational health and safety (OHS) specialist to ensure effective environmental and social (E&S) risk management in line with the national regulatory and ESF requirement throughout the lifetime of the project. The Environmental and Social Commitment Plan (ESCP) will identify the exact number of specialists needed.

## II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

### A. Environmental and Social Risk Classification (ESRC)

Substantial

#### Environmental Risk Rating

Substantial

The environmental risk rating is determined as Substantial at the concept stage. The overall environmental impacts will be positive with no regret flood risk measures, and other investments reducing and improving flood risk management in the selected basins and enhancing well-being of population living in risk prone areas. The scale of the proposed flood management structures under Component 1 (e.g. small dams, check dams, levees, retaining walls, embankments, reservoirs, dry and wet polders, etc.) is expected to be medium to large scale. The key impacts of



these types of flood control investments will generally include (i) the impact on aquatic habitats due to river training works such as levees and retaining walls and consequent release of sediment plumes and (ii) floodplain habitats due to flood embankments construction affecting riparian vegetation, fertile agricultural lands through land clearance. Plus, construction of these structures will require considerable amount of borrow and aggregate material, resulting in resource efficiency considerations. Since the construction activities of the flood management structures will take place near or within water bodies, water pollution will be of concern. In addition to those, the routine construction-related impacts are expected to be relevant to air and noise emissions, waste management, soil management, occupational health and safety risks, traffic safety, structural safety of the flood protection structures depending on the size, and habitat disturbance due to construction. Such impacts are not expected to produce significant or irreversible adverse effects on human health and/or the environment nor result in significant adverse cumulative or transboundary impacts. These risks and impacts are expected to be temporary and predictable, medium to large in magnitude, which can be mitigated through international good management practices. The works planned under Component 2 are relevant to systems and capacity establishment which are soft components that do not include civil works and thus, do not pose any adverse environmental and social impacts. There is no geographical limitation for the project and the sub-project specific design and locations may not be known until appraisal stage. In this respect, the potential environmental and social risks and impacts will be mostly relevant to Component 1 activities and be addressed through project scale Environmental and Social Management Framework (ESMF), to be prepared disclosed and consulted upon prior to project appraisal. The sub-projects that will adversely affect the critical and sensitive habitats, as well as cultural heritage will not be eligible for financing; the exclusion list in the ESMF will screen those out. The project will also support preparation of feasibility studies for existing technical documents to ensure integrated flood management with basin approach including greening of key investments, where the ESF provisions will be included within the scope of the Terms of Reference (ToRs). Thus, the substantial risk rating is determined based on: (i) the sub-projects will not be located in any sensitive areas and those will be ineligible for financing, (ii) the environmental risks and impacts are mostly temporary, reversible, spatially limited and mostly medium in magnitude, (iii) mitigation measures can be designed through known applications, (iv) need of support for the Borrower in terms of E&S management capacity which will be strengthened through capacity building activities. The environmental risk rating will be reviewed during preparation phase and will be revised to High if there will be any dam structures above 15 meters to be financed within the scope of the project.

**Social Risk Rating**

Substantial

The social risk rating is classified as Substantial at the concept stage. The Project will finance physical investments such as small-scale dams and check dams, levees, retaining walls, embankments, polders etc. as well as rehabilitation of supplementary structures, nature-based solutions such as wetlands which will help improving the flood protection measures and improve flood management practices enhancing well-being of population living in risk prone areas for no regret flood risk reducing and improving flood risk management. The social impacts are expected to be mostly positive. Whilst adverse impacts are expected to be mostly temporary, predictable and/or reversible there will be impacts to land and livelihoods. Activities under Component-1 may induce land-based livelihood impacts due to temporary or permanent loss of land. Sub-projects are expected to result in economic displacement and loss of land-based livelihoods among other social impacts (labor management, dust, noise, traffic etc.) during the construction phase. Potential community health and safety risks are associated with construction and operation phases of sub-projects. These may include noise, air emissions, odor; traffic and temporary road closures; management of construction waste; risk of increased SEA/SH incidents due to labor influx; increased transmission risks of COVID-19 from incoming workers; water-borne diseases based on improper design, construction or operation. Physical displacement is not expected. The ESMF and Resettlement Framework (RF) to be prepared will outline how these



risks will be managed. DSI will also develop a Stakeholder Engagement Plan (SEP), which details how impacted groups, including those most in need, will be included in and benefit from the project's interventions. In addition, given the large volume of civil works to be undertaken standalone Labor Management Procedures (LMP) will be prepared by DSI that sets out the labor requirements for the project's various workers including a workers' grievance mechanism. The project is not expected to have any significant impacts on vulnerable groups. The SEA/SH risk is currently assessed as Moderate, but the exact size of the labor workforce and the SEA/SH risks posed to the local populations will be further assessed in site-specific assessments. The project will implement SEA/SH mitigation measures, including: an SEA/SH action plan as part of the project site-specific ESMPs; a Code of Conduct for workers; a mechanism to report SEA/SH grievances; and, training and awareness sessions for project workers and affected communities. Besides, the national law and legislation on SEA/SH are in place and it includes robust measures for addressing SEA/SH risks, including Codes of Conduct for employees and contractors. It would be ensured that the GM to be established for the Project will have necessary and applicable channels to receive SEA/SH grievances through a survivor centric approach. To be able to ensure this capacity of the GM, DSI will be supported by the Bank through trainings and guidance to be provided and the SEP will include measures for DSI to develop project-specific procedures to manage SEA/SH grievances. The risk of forced labor is not expected.

## B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

### B.1. General Assessment

#### ESS1 Assessment and Management of Environmental and Social Risks and Impacts

##### **Overview of the relevance of the Standard for the Project:**

The overall long-term environmental and social impacts of the project will be positive through improving the flood protection measures and flood management practices enhancing well-being of population living in risk prone areas. Improved flood risk protection will increase population health and well-being through prevention of water pollution with storage infrastructure expected to increase water use efficiency thus reduce energy demand for collection and conveyance. The potential investments under Component 1 are flood risk reducing and improving flood risk management physical structures such as construction of small-scale dams and check dams, levees, retaining walls, embankments, polders etc.; as well as rehabilitation of supplementary structures such as bridges, culverts; piloting nature-based solutions such as wetlands; and implementation of innovative techniques for flood management. Such activities may pose adverse environmental and social risks and impacts such as: (i) the impact on aquatic habitats due to river training works such as levees and retaining walls disturbing the river bed and releasing sediment plums, and floodplain habitats due to flood embankments affecting riparian vegetation, fertile agricultural lands etc., (ii) impacts relevant to land clearance, and (iii) procurement and use of borrow and aggregate material and relevant resource efficiency measures, (iv) water pollution due to working near and within water bodies as well as typical construction related impacts such as (i) generation of air, noise and exhaust emissions, (ii) generation of construction and solid waste management, (iii) soil management, (iv) habitat disturbance, (v) labor and working conditions, (vi) OHS hazards and risks such as accidents and injuries, (vii) community health and safety and traffic safety, (viii) structural safety of the flood protection structures depending on the size, (ix) economic and livelihood impacts due to potential land acquisition and expropriation process required due to movement of heavy vehicles. Physical displacement is not expected. The project will consider and assess the distance and location of the sub-projects to the residential areas in order to keep the impact on the livelihoods of the communities limited and to avoid potential physical displacement



and minimize land acquisition. Although the context of the project activities are known at the concept stage, the specific sub-projects and their exact locations and design may not be identified until appraisal stage.

In this respect, the potential environmental and social risks and impacts will be identified, addressed and managed within the scope of the project level Environmental and Social Management Framework (ESMF), RF and LMP which will be prepared, disclosed, consulted upon and redisclosed prior to project appraisal. In addition, a SEP, citizen engagement strategy and grievance mechanism (GM) will be developed to guide project design and implementation, particularly with regards to the ensure involvement of community members and stakeholders to project design and receiving regular feedback from project beneficiaries. The Environmental and Social (E&S) instruments, to the satisfaction of the Bank, will be adopted and implemented throughout the lifetime of the project. The ESMF will establish requirements and procedures for the identification, assessment and management of the (E&S) risks of the sub-projects, an exclusion list as a screening criteria, and development of environmental and social assessments, as well as roles and responsibilities in a manner acceptable to the Bank. The sub-projects with a high-risk rating, and those adversely affecting the critical and sensitive habitats, cultural heritage and may lead to any type of exclusion of any group amongst the communities will not be eligible for financing; the exclusion list in the ESMF will screen those out. The ESMF will be based on the applicable requirements of the Turkish national laws and regulations, the Environmental and Social Standards (ESSs) of the WB's ESF and applicable World Bank Group's Environmental Health and Safety (WBG's EHS) Guidelines, and Good International Industrial Practices (GIIP). If there are gaps among the different requirements and standards, the most stringent ones will be applied to the project. Sub-project-specific environmental and social assessment (ESA) documents (i.e. Environmental and Social Impact Assessment report, Environmental and Social Management Plan [ESMP], ESMP Checklist) will be identified and prepared based on the E&S screening procedure under the ESMF. The site-specific instruments will be required, which may include ESIA reports and ESMPs, to be prepared once the exact subproject technical details are known, and to be cleared by the Bank, disclosed and consulted upon before the completion of respective bidding document packages for each sub-project.

The project will also support preparation of feasibility studies, designs and review of existing technical documents to ensure integrated flood management at the river basin scale considering the impacts of climate change to ensure integrated flood management with basin approach including greening of key investments as well as expansion of the early warning systems in the country. In the Terms of Reference (ToR) of the feasibility studies, the ESF provisions will be included. The impacts and risks that shall be addressed in the technical assistance sub-components will be including but not limited to: water pollution, soil management, terrain and land use, biodiversity areas and elements (including wildlife, fish, birds, vegetation), land use, etc.

**Areas where “Use of Borrower Framework” is being considered:**

The use of Borrower's Framework is not considered.

**ESS10 Stakeholder Engagement and Information Disclosure**

Among the potential direct key stakeholders of the project are local communities, seasonal workers, women's groups, muhtars and community leaders, relevant regional directorates of DSI, AFAD, State Meteorological Services and other public authorities. Civil society organizations working on natural resources, ecology and nature protection are also considered as stakeholders along with other interested parties. Detailed baseline/stakeholder mapping will



be included in the SEP to identify whether the projects could potentially impact vulnerable groups, including but not limited to seasonal/migrant workers and refugees.

Stakeholder engagement will be crucial from design to project completion and will require the involvement of various departments within DSI, and other potential partners including AFAD, State Meteorological Services and other public authorities as well as site level. DSI will prepare a SEP with consultation activities at key ministerial, government agencies, NGOs and community level. The SEP will employ different modalities for engagement with different stakeholders, also incorporating special measures for handling the challenges of the Covid-19 pandemic. As required by the government restrictions on Covid-19, DSI will make efforts to hold public consultation meetings (or use other available channels) prior to the project activities to inform these key stakeholders on the project, its impacts and implementation schedule and its grievance mechanism (GM) in order to avoid any negative feedback or misunderstanding from the impacted communities. The SEP, to the satisfaction of the Bank, will be disclosed on DSI's official website and consulted upon prior project appraisal.

The SEP process requires consultation and dissemination of project-related information (including E&S risks and impacts) with all identified and potential stakeholders/beneficiaries of the Project, where and when necessary. In case stakeholders (internal or external) who may be considered vulnerable (in terms of gender, disability, age, etc.) will be identified during the project implementation, the SEP will need to be updated, and other ESA documents should define the tools and method to engage with and include measures to avoid adverse impacts to these groups and provide benefits, where possible.

According to the Environmental Impact Assessment (EIA) Regulation of Türkiye, some of the project activities to be carried out within the scope of the Project, may not fall into the Annex lists of EIA Regulation. Thus, the scope of the project activities may be exempt from the national EIA process; which means there is no formal stakeholder engagement process required under national legislation. Therefore, DSI will prepare sub-project specific SEPs, in line with the provisions of the project level SEP outlining the corporate communication strategy of DSI for engaging with its stakeholders. The ESMF, RF, SEP and sub project specific plans will also indicate any vulnerable and disadvantaged groups during the project preparation phase.

In Türkiye the Presidency's Directorate of Communications (CIMER) is used as an official state tool which serves to receive requests, complaints, compliments, denouncements and inquires for information from the public. CIMER is an electronic platform for the use of right of petition (Law No 3071; Official Gazette No. 18571 dated 10.11.1984) and right to information act (Law No 4982; Official Gazette No. 25269 dated 24.10.2003).

DSI has a three level GM in place which allows for the identification and resolution of all grievances generated by DSI activities. In DSI's current GM, the grievances can be addressed at three levels: (i) DSI Branch Directorate level, (ii) Regional Directorate level, and (iii) DSI General Directorate level. The existing system will be adopted to collect project specific data and will be disclosed during consultations for the use of all stakeholders through project implementation. Community involvement will be sought through timely consultations and DSI's GM will be utilized to resolve concerns as they arise. Both the consultation process and GM will consider the different needs and concerns of all stakeholders including any vulnerable groups that maybe affected by the project. It will be ensured that the GM to be established for the Project will have necessary and applicable channels to receive SEA/SH grievances through a survivor centric approach. The SEP will include measures for DSI to develop project-specific procedures to manage





SEA/SH grievances. DSI will raise awareness of the grievance mechanism among subproject stakeholders who may be affected by or interested in the project.

As with other E&S requirements, the progress of engagement activities and any documents or tools produced under the SEP will be disclosed publicly and regularly reported to the Bank via project progress reports.

## **B.2. Specific Risks and Impacts**

**A brief description of the potential environmental and social risks and impacts relevant to the Project.**

### **ESS2 Labor and Working Conditions**

This standard is relevant. Project workers will include (i) direct workers (PIU staff including the civil servants of the DSI and consultants, experts, trainers, etc. engaged by PIU); (ii) contracted workers (employees of firms carrying out studies and assessments, and contractor's workers); and (iii) primary supply workers for any materials supply for the civil works required for investments. Community workers are not anticipated to be engaged in project activities.

The PIU employees (from DSI) are in the category of civil servants. The Civil Servant Law applies to all civil servants including other public officers, and other personnel who are employed as contractual personnel, temporary staff and workers. Currently the details regarding the project workers are unknown. Project workers will be evaluated in detail under ESA studies of the investments/sub-projects and discussed in the LMP.

Türkiye is a party to a multitude of International Labor Organization (ILO) conventions, which are in line with ESS2 requirements. National Labor Law includes provisions on non-discrimination, freedom of association, minimum employment age, child and forced labor, OHS, and dispute resolution. Risks related to child/forced labor are not foreseen.

Project impacts related to labor and working conditions may include OHS issues and labor influx induced impacts during civil works and worker grievances. Any possible risks and impacts regarding non-discrimination, child and forced labor, workplace harassment, worker rights, etc. will be discussed under the project LMP and investment specific Labor Management Plans that will be prepared during project implementation in line with the project LMP by the contractor.

The construction workers will be accommodated in workers' camps, which will meet the requirements of labor and OHS legislation of Turkey, and in line with the Bank guidance on standards that should be applied to the provision of workers' accommodation.

The Project will prepare a LMP prior to Appraisal. The LMP will state the policies and procedures for all categories of workers, identify the main labor requirements and risks associated with the project and help DSI to determine the resources necessary to address project labor issues. The LMP will also include details on the workers' Grievance Mechanism and other tools such as the Code of Conduct and requirements addressing SEA/SH risks.

Despite the overall alignment with good international standards, labor risks under construction projects stem from not sufficient enforcement of Occupational Health and Safety (OHS) measures; over-time work and related non-



payment; and unequal treatment between men and women. Accordingly, labor-related risks under this project also include (i) OHS issues in construction sites, (ii) traffic and road safety issues, and (iii) inadequate terms and conditions of employment. The construction contractors shall be subject to national OHS legislation and the OHS provisions of ESS2 and ESS4 and will be required to achieve the more stringent of the WBG Environmental, Health and Safety Guidelines (ESHGs), Good International Industry Practice (GIIP) or national OHS legislation.

The project will generate several OHS risks associated with civil works, including emissions of dust, noise, and vehicle exhausts, generation of construction and solid waste, traffic-related risks, and risks of accidents and injuries when working at heights, working with heavy and electrical machinery and equipment, and working in areas with unbarricaded/uncovered holes, etc. The ESMF will assess specific OHS risks associated with proposed subprojects and identify appropriate risk management and mitigation measures, following the applicable requirements of the national policies, ESS2 and WBG's EHS Guidelines. Those will be further elaborated in the site-specific ESA documents. Furthermore, all projects with civil works will require contractor OHS Management Plans, commensurate with the risks and impacts. Additional management plans such as Traffic Management Plans may be required as deemed necessary through initial assessments included in the ESMF.

DSI's GM will also adopt and improve itself to handle labor complaints and suggestions (including inquiries for information or whistle-blower complaints). For each sub-project, the Contractors will be required to establish, maintain and monitor GMs for contracted workers.

### **ESS3 Resource Efficiency and Pollution Prevention and Management**

This standard is relevant. The project activities will be overall positive regarding ESS3 considerations and help to reduce and effectively manage flood risks and thus limit relevant losses and damages to assets through prevention of water pollution. The project will also support water use efficiency and thus reduce energy demand for collection and conveyance of water, with relevant storage infrastructure planned under the design of the project. Meanwhile, the proposed flood control structures require considerable amount of aggregate and borrow material. The project will ensure that the raw materials needed for the project activities will be utilized based on resource efficiency principles and be obtained from permitted and licensed sites and resources in line with national regulatory requirements. The project activities will take place near water bodies and hence water pollution risks and impacts, and relevant mitigation measures will be identified and addressed in the ESMF. The civil works within the scope of the project activities will also entail the use of energy, water, and materials such as sand, cement, timber, etc. The potential risks and impacts of sub-project activities include noise, dust and exhaust emissions and the generation of construction wastes and solid wastes. The ESMF of the project will address resource efficiency and pollution prevention and management measures consistent with applicable national regulations, ESS3, WBG's EHS Guidelines, and GIIP, following the ESF's mitigation hierarchy to ensure sustainable use of resources and minimizing adverse impacts on human health and the environment. Risk and impact management and mitigation measures will be further elaborated in detail in site-specific instruments.

### **ESS4 Community Health and Safety**

This standard is relevant. The potential risks and impacts on community health and safety (CSH) are associated with the proposed civil works and relevant to emissions of dust, noise, odor, and vehicle exhausts; and traffic and road



safety risks due to increased traffic volume and movements of heavy-duty vehicles; risks of accidents and injuries posed by uncovered or unbarricaded open holes and exposed electric cables; temporary road blockades and closures and potential disruptions to local communities and increasing pressure on public services due to potential influx of construction workers and presence of workers camps, risk of increased SEA/SH incidents due to labor influx. Community's potential exposure to waste (including hazardous waste), stagnant water, wastewater, particulate matters, and construction workers may lead to increased risks of health issues (increased transmission risks of COVID-19 from incoming workers, etc.), including water-borne and vector-borne diseases (resulting from poor site management), and communicable diseases relating to labor influx (i.e., COVID-19 virus, HIV/AIDS, and STDs), other similar communicable diseases, etc.). The project activities will take place in semi-urban and rural settlements and the project will require the outside workforce to be accommodated and work on the project activities. The SEA/SH risk is currently assessed as Moderate, but the exact size of the labor workforce and the SEA/SH risks posed to the local populations will be further assessed in site-specific assessments. The project will implement SEA/SH mitigation measures, including: An SEA/SH action plan as part of the project site-specific ESMPs (including a mapping of site-specific service providers); a Code of Conduct for workers, a mechanism to report SEA/SH grievances, and training and awareness sessions for project workers and affected communities. The ESMF will assess the risks and impacts to the health and safety of the communities, including groups that might be vulnerable. The sub-project-specific ESIA and ESMPs will also detail management and mitigation measures to ensure community health and safety during construction, as well as monitoring and reporting requirements.

Competent professionals shall review and approve the project structures' design and construction since those will take place in high-risk locations prone to floods and the rehabilitated and new structures shall be established to improve flood control. The design and construction of new structures will be in accordance with national requirements, the WBG EHS Guidelines, and GIIP, and take into consideration safety risks to third parties and affected communities and support those with disabilities to ensure universal access.

As the project also includes construction of dams and check dams, dam safety measures in accordance with ESS4 will also be followed. At the concept stage, those dams are reported as small dams however the dam safety aspects will be considered and properly addressed by appraisal stage. Depending on the classification of the structures in line with the ESF requirements, the project may need reviews by an independent panel of experts for the investigation, design, and construction of the dam and the start of operations. If there will be any dam structures above 15 meters to be financed within the scope of the project then those will be classified as a large dam and the environmental risk rating will be revised to High and all applicable ESF provisions will apply. If the dams within the scope of the project does not fall under any categories defined in the ESF, dam safety measures designed by qualified engineers in accordance with GIIP will be adopted and implemented. At minimum, Good International Industrial Practices (GIIP) will be adopted and implemented for the design, construction, supervision and operation of the facilities.

### **ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**

This standard is relevant. Potential land-based impacts of the sub projects are foreseen as follows; (i) loss of land used for agriculture purposes, (ii) loss of other assets on land and (iii) loss of crops and tress, (iv) loss of land-based livelihoods and (v) limited access to or restrictions on land.



Subprojects under Component 1 (small-scale check dams, levees, retaining walls, embankments, polders etc.) are not yet fully defined; however, they are likely to have temporary and permanent land acquisition. However, through the selection criteria set for the subprojects to be financed under this component, the project will consider and assess the distance and location of the sub-projects to the residential areas in order to keep the impact on the livelihoods of the communities limited and to avoid potential physical displacement and minimize land acquisition.

DSI will make efforts to utilize public lands and existing roads for investments that require land take. In cases where public lands are not available, land acquisition will be kept to a minimum during project design. Where land take is inevitable, DSI will ensure all land-based losses are compensated in compliance with ESS5. Within the scope of the Project physical displacement is not expected, but economic displacement is anticipated. Entitlements regarding economic displacement will be analyzed in the RF and conditions will be set in the sub-project specific Resettlement Plans (RPs).

Since the exact locations and footprints of the sub projects for Component-1 are not known, a Resettlement Framework (RF) satisfactory to the Bank, will be prepared and disclosed by DSI before Appraisal. Once design is complete, and sub projects are defined, DSI will prepare specific RPs for subprojects that will require land take. In cases where DSI needs to utilize lands acquired within the last five years, an Ex-Post Social Audit will be required to determine if the acquisition was carried out in compliance with ESS 5.

#### **ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources**

ESS6 is relevant. The project activities may take place in rural and peri-urban areas and thus there might be adverse impacts on biodiversity elements due to soil removal and compacting, clearance of vegetation and habitat loss, movement of heavy vehicles (resulting in generation of dust and noise) etc. as well as aquatic habitats as the project structures will be within and adjacent to water bodies such as rivers. The potential impacts on the aquatic habitat elements are habitat disturbance due to sediment and plume generation in water, water pollution, river-bed disturbance, noise etc. In the ESMF, there will be specific criteria for site selection that will avoid overlapping of the sub-project locations with sensitive habitats including Key Biodiversity Areas, Important Areas, nationally protected areas, critical habitats, and the sub-projects having adverse impacts on such sensitive habitats will be screened out through the Exclusion list. The ESMF will also provide guidance on the impact identification and respective mitigation measures in accordance with ESS6 requirements, adopting mitigation hierarchy and precautionary approach. The environmental and social assessment documents will include analysis of flora & fauna elements, habitats and identification of any potential impacts on biodiversity in the sub-project impact area. In addition, the ToRs for the feasibility studies will include provisions for identification and avoidance of critical habitats.

#### **ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities**

This standard is not relevant since there are no groups or communities in Türkiye who meet the definition of this standard.

#### **ESS8 Cultural Heritage**



ESS8 is relevant. The project scale ESMF will have exclusion criteria to avoid any investments that are adversely affecting the cultural heritage sites, intangible/tangible cultural heritage and leading to loss of temporary and/or permanent access in accordance with ESS8, and those sub-projects will be ineligible for financing. In consideration of the chance finds, the ESMF will provide guidance on Chance Finds Procedure which will outline the measures to be taken if any cultural areas/elements are encountered during project civil works. The procedure will be included in the site-specific environmental and social assessment documents. Besides, within the scope of the studies to be carried out for the preparation of subproject specific ESIA/ESMPs existing tangible and intangible cultural heritage and mitigation measures to preserve will be identified.

**ESS9 Financial Intermediaries**

This standard is not relevant since the project will not involve any financial intermediaries.

**B.3 Other Relevant Project Risks**

All relevant risks that have been identified are summarized against each of the standards.

**C. Legal Operational Policies that Apply**

**OP 7.50 Projects on International Waterways**

No

**OP 7.60 Projects in Disputed Areas**

No

**III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE**

**A. Is a common approach being considered?**

No

**Financing Partners**

N/A

**B. Proposed Measures, Actions and Timing (Borrower’s commitments)**

**Actions to be completed prior to Bank Board Approval:**

Preparation, disclosure and consultation on ESMF, LMP, RF and SEP

Preparation and disclosure of the Environmental and Social Commitment Plan (ESCP)

**Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):**

Development, disclosure and consultation on sub-project specific Bank approved ESA instruments (ESIA reports, ESMPs and RPs) before any bidding documents are disclosed

Inclusion of environmental and social provisions into ToRs of any feasibility or design study to be financed under the Project

Public Disclosure



Inclusion of relevant environmental and social provisions in bidding documents and ensuring contractors' adherence to the environmental and social instruments

Monitoring and reporting, including incidents and accidents and contractors' monthly reports

Continuous implementation of SEP

Capacity building to enhance the environmental and social performance of the implementing agency on ESF application and ESS compliance

### C. Timing

**Tentative target date for preparing the Appraisal Stage ESRS**

10-Jun-2023

## IV. CONTACT POINTS

### World Bank

Contact: Canan Yildiz Uz Title: Senior Water Resources Management Specialist

Telephone No: 5242+8338 Email: cyildiz@worldbank.org

Contact: Canan Yildiz Uz Title: Senior Water Resources Management Specialist

Telephone No: 5242+8338 Email: cyildiz@worldbank.org

Contact: Salih Bugra Erdurmus Title: Senior Disaster Risk Management Specialist

Telephone No: 5242+8378 / 90-312-459-8378 Email: serdurmus@worldbank.org

### Borrower/Client/Recipient

Borrower: Ministry of Treasury and Finance

### Implementing Agency(ies)

Implementing Agency: State Hydraulic Works

## V. FOR MORE INFORMATION CONTACT



The World Bank  
1818 H Street, NW  
Washington, D.C. 20433  
Telephone: (202) 473-1000  
Web: <http://www.worldbank.org/projects>

## VI. APPROVAL

Task Team Leader(s):	Canan Yildiz Uz, Canan Yildiz Uz, Salih Bugra Erdurmus
Practice Manager (ENR/Social)	Anne Olufunke Asaolu Recommended on 03-Mar-2023 at 09:39:36 EST
Safeguards Advisor ESSA	Abdoulaye Gadiere (SAESSA) Cleared on 16-Mar-2023 at 12:21:50 EDT